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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,130	07/16/2003	Mickey Brigance	032010.011	1973

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EXAMINER

CLARDY, S

ART UNIT PAPER NUMBER

1617

DATE MAILED: 03/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/621,130

Applicant(s)

BRIGANCE ET AL.

Examiner

S. Mark Clardy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Claims 1-22 are pending in this application which claims benefit of US Provisional Application 60/396,150, filed July 16, 2002.

Applicants' claims are drawn to an aqueous or dry "ionically balanced composition" (claims 1-9; concentrate: claims 10-15) comprising at least one nonionic acrylamide polymer and an ionically counterbalanced diluent (e.g., an ammonium compound such as ammonium sulfate: claims 2-5), methods of making them (claims 16-17), and methods of applying them to soil or a plant (claims 18-22).

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It cannot be determined exactly what is intended by the term "ionically balanced" with respect to making the instant compositions. It may be possible to read into the phrase a meaning pertaining to achieving a neutral pH, but that does not appear to be the criterion for determining whether the desirable endpoint has been reached.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants have used the phrase “ionically balanced” extensively, but on further inspection, it appears that the phrase is left undefined, or at least ill-defined. Thus upon reading the disclosure, the artisan must make an assumption as to what exactly the phrase means. It would appear to refer to compositions which are at a neutral pH, i.e. compositions in which molar (or more accurately, equivalent) quantities of anionic components and cationic components are stoichiometrically equal. It cannot be determined from the disclosure if a neutral pH is the desired titration endpoint for making the compositions herein. Further, it cannot be determined exactly, and explicitly, how one of ordinary skill in the art would determine whether a composition made according to the disclosure would, in fact, be “balanced”.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-22 are again rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Chamberlain (US 5,529,975), Brigance et al (US 6,423,109), and Rose et al (US 6,288,010).

Chamberlain, again, teaches sprayable agricultural compositions comprising water soluble polyacrylamide (abstract) wherein anionic or cationic polyacrylamide may be used (col 5, lines 48-62), but the nonionic polyacrylamide is preferred (col 5, lines 21-32). Agricultural

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components which may be used with the composition include plant nutrients, plant growth regulators, and pesticides (col 8, line 55+). The polyacrylamide component is useful for controlling drift when the composition is sprayed.

Brigance et al, again, teach free flowing fertilizer compositions with enhanced anti-drift characteristics (abstract) comprising a nitrogen containing fertilizer such as various ammonium salts or urea (col 3, lines 12-16), and a polyacrylamide.

Rose et al, again, teach compositions with anti-drift characteristics comprising a water soluble anionic polyacrylamide (columns 3-4); a nonionic polyacrylamide may also be used (col 6, lines 36-47). Among the disclosed fertilizer components which may be added are ammonium salts and urea (col 5, lines 10-24).

One of ordinary skill in the art would be motivated to combine these references because they disclose anti-drift characteristics of the same polyacrylamide component in agricultural compositions.

Thus, again, it would have been *prima facie* obvious to the ordinary artisan at the time the invention was made to have made applicants' compositions comprising nonionic polyacrylamide and ammonium salt compositions because the prior art teaches that these same components were known to be useful in drift-controlled fertilizer, and other agrochemical compositions. One of ordinary skill in the art would be capable of selecting the amounts of the components which will result in a desirable, typically neutral pH (or other pH, depending on the preferred pH for the active agent in the composition). Thus, the components of the composition will necessarily be "balanced" in order to achieve the preferred pH for the active agent.

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Finally, inasmuch as the compositions as described in the prior art must be sprayable (having anti-drift characteristics), it would appear that the ordinary artisan would necessarily combine the components, such as those claimed herein, in a way which results in a non-gelled, sprayable (and hence "balanced"?) composition.

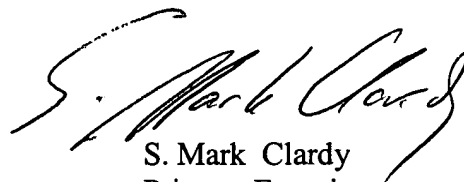
No unobvious or unexpected results are noted; no claim is allowed.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Mark Clardy whose telephone number is 571-272-0611. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



S. Mark Clardy
Primary Examiner
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March 28, 2006